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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,070	09/22/1999	ARTHUR ANDERSON	3876	4148

32681 7590 06/14/2007
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EXAMINER

RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/401,070

Applicant(s)

ANDERSON ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 and 56-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 and 56-79 is/are rejected.
- 7) ☒ Claim(s) 3, 15, 26, 45, 68 and 69 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Pre-Appeal Brief Conference Request filed on 3 April 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Response to Amendment

2. Applicant's arguments with respect to claims 1-3, 9, 10, 14-16, 21, 22, 26-40, 43, 49, 51-54, 56-63, 66, 67, 69-71, 75, and 76 have been considered but are moot in view of the new ground(s) of rejection.

3. The indicated allowability of claims 4-8, 11-13, 17-20, 23-25, 41, 42, 44-48, 50, 64, 65, 68, 72-74, and 77-70 is withdrawn in view the fact that these claims merely recite intended use limitations, which carry no patentable weight, as outlined below.

Claim Objections

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4. Claim 3 is objected to because of the following informalities: in lines 1-2, “bus further includes” should be “bus includes,” since the bus was not previously recited as including a feature, and, in line 5, “receiving communications” should be “receiving the communications”. Appropriate correction is required.

5. Claim 15 is objected to because of the following informalities: in lines 5-6, “the accessory being configured to be coupled” should be “the at least one accessory being configured to be coupled”; and in line 7, “the accessory” should be “the at least one accessory”; in line 8, “the accessory” should be “the at least one accessory”. Appropriate correction is required.

6. Claim 26 is objected to because of the following informalities: in line 5, “monitor” should be “monitoring”. Appropriate correction is required.

7. Claim 45 is objected to because of the following informalities: claim 45 depends upon itself. Appropriate correction is required.

8. Claim 68 is objected to because of the following informalities: in line 2, “communications protocol further comprises” should be “communications further comprises a packet, where the packet comprises:”. Appropriate correction is required.

9. Claim 69 is objected to because of the following informalities: in line 2, “communications protocol further comprises” should be “communications further comprises a packet, where the packet comprises:”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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11. Claims 51-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 51 recites the limitation "the packet" in line 5. There is insufficient antecedent basis for this limitation in the claim. As currently amended, claim 51 is directed to "a headset adapter for communicating with a headset accessory via an accessory interface bus" and a "data packet." The claim does not relate these two items, such that it is unclear whether "the data packet" should have antecedent basis included earlier in the claim or whether "the data packet" should be "a data packet."

12. Claims 56-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 56 currently recites: "a plurality of commands to independently and directly control, monitor, or identify." It is unclear whether this phrase should be interpreted as "a plurality of commands to independently and directly perform control, monitoring, or identification of," such that the term "independently and directly" modifies each of "control, monitoring, and identification," or whether "independently and directly" modifies the term "control" only. Given the nature of Applicant's arguments, it appears that "directly and independently" should modify each of "control, monitoring, and identification." However, dependent claims 57-62, which modify the term "a plurality of commands" by specifying certain types of commands, recite commands that would not allow for "direct and independent" control, monitoring, and identification. For example, claim 60 requires "a command for turning the specific accessory on or off." Such a command is presumably sent in response to a user requiring the use of or terminating the use of an accessory. As such, the command is

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not “independent” since it is dependent upon an outside source, namely the user. For purposes of prior art rejections, Examiner will interpret “a plurality of commands to independently and directly control, monitor, or identify” as “a plurality of commands to independently and directly perform control, monitoring, or identification of”.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 40-50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

15. To comply with the subject matter eligibility requirement of 35 U.S.C. § 101, a claim must pass the following test: (1) Does the claimed invention fall within one of the statutory classes? If not, then the claim is non-statutory. (2) If it does, does the claimed invention fall/cover/include a judicial exception? If not, the claim is statutory. If so, the claim is only statutory if there is a practical application (a) by physical transformation or (b) that produces a useful and tangible result.

16. In this case, claims 40-50 (directed to a method) meet Question One since they fall within the “process” statutory class of 35 U.S.C. § 101. However, these claims fail Question Two since they fall within a judicial exception, i.e. the claims are an attempt to seek patent protection of a computer program in the abstract. This is evidenced by page 13, lines 7-14, of the Specification which demonstrate that the method is implemented using computer programs located on the micro-controller. Since the claims are merely

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trying to claim “computer code” in the abstract, the claims fall within the “abstract idea” judicial exception.

17. Once the answer to Question Two is “yes,” i.e. the claimed invention falls under a judicial exception, the claimed invention is only statutory if it produces either a practical application by physical transformation or a practical application that produces a useful and tangible result. In this case, there is no practical application by physical transformation since the software does not manipulate any physical structure and since the structure of the machines in each of these claims does not change. In addition, there is no practical application that produces a useful and tangible result since, when implemented in software, the claims never require that the software be executed by a computer. Therefore, the claims are non-statutory.

18. In order to make these claims statutory, Applicant could amend the claims to turn the method steps into structural limitations, e.g. “means for detecting”. Applicant could also amend the claims to turn the claims into a purely “software” claim by amending the claims to read, for example, “A computer-readable medium encoded with a data structure [or software] for controlling and monitoring an accessory.”

19. Claims 51-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 51-54 are directed to a data packet per se in addition to “a headset adapter for communicating with a headset accessory.” These two items have not been related by the claim, such that, as currently amended, the claim is directed to two distinct inventions, one of which is a data packet per se. Since the data packet is merely energy, the packet does not fall within one of the four statutory classes consisting of a process, a machine, a manufacture, and a composition of matter.

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Specifically, the claimed signal is not a process because it does not define a series of steps. See MPEP § 2106(IV)(B)(2)(b). In addition, the claimed signal is not a machine, a manufacture, or a composition of matter since the claimed signal has no physical structure. See MPEP § 2106(IV)(B)(2)(a). As such, the claimed data packet is not statutory subject matter. Examiner will not examine the claims with respect to 35 U.S.C. §§ 102 and 103, but rather Examiner will rely on the rejections made in previous Office Actions to indicate to Applicant the state of the prior art.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claim 1-32 and 56-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Kowalski (USPN 4,654,655).

22. Regarding claims 1, 14, 15, 26, 56, and 66, Applicant admits as prior art a telecommunication system comprising: a telephone headset (p. 1, lines 13-20); a headset adapter configured to be coupled to the telephone headset and having an accessory interface bus (p. 2, lines 10-12, where the headset accessories are coupled to the headset adapter, and p. 3, lines 1-6, where the coupling is done through a "signaling line," i.e. a "accessory interface bus"), the headset adapter being configured to be coupled to a base telephone (p. 1, lines 17-20, where the headset adapter is used to connect a headset to a telephone system, where it is implicit that the telephone system includes a base telephone); and an accessory for the telephone headset configured to be coupled to the

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accessory interface bus of the headset adapter (p. 2, lines 6-15, where a remote handset hookswitch and an in-use indicator are examples of accessories coupled to the accessory interface bus).

Applicant does not expressly disclose as prior art an accessory interface bus for transmitting and receiving communications packets, wherein the accessory is independently and directly controlled and monitored by the headset adapter, the headset adapter being a microcontroller, the controlling and monitoring occurring when the headset accessory is in communication with the headset adapter via the transmission of communications packets between the accessory and the headset adapter over the accessory interface bus. Kowalski teaches, in a telephone system, independently and directly controlling and monitoring peripheral devices by a bus controller through the use of communication packets (col. 3, lines 7-11, where the bus controller, i.e. an "adapter," independently and directly controls peripheral devices, i.e. "accessories," over a bus; col. 4, lines 27-31, where the bus controller independently and directly monitors the peripheral devices when it monitors the bus for requests for transmission; and col. 4, lines 23-27, where the control and monitoring is done using packets). In addition, Kowalski teaches implementing the bus controller using a microprocessor, i.e. a "microcontroller" (col. 8, lines 13-15). Kowalski's system permits multiple peripheral units to communicate with the bus controller and with each other (col. 2, lines 15-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the accessory bus of Applicant's admitted prior art in a manner similar to that of Kowalski to obtain an accessory interface bus for transmitting and receiving communications packets, wherein the accessory is independently and directly controlled

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and monitored by the headset adapter when the headset accessory is in communication with the headset adapter via the transmission of communications packets between the accessory and the headset adapter over the accessory interface bus. One of ordinary skill in the art at the time of the invention would have been motivated to do this to obtain an accessory bus in which the accessory adapter is able to communicate with the accessories.

23. Regarding claims 4-13, 17-25, 28-32, 57-65, and 67-69, Examiner notes that these claims recite "intended use" limitations which carry no patentable weight. Specifically, claims 4-13, 17-25, 28-32, 34-39, 64, 65, 68, 69, 72-74, and 77-79 claim limitations pertaining to the structure of a packet transmitted on a bus, whereas claims 57-63 and 67 claim limitations pertaining to the communications protocol used on the bus. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, the bus disclosed by Applicant's admitted prior art in view of Kowalski is capable of carrying the claimed packet and of supporting the claimed communications protocols since the bus is merely an electrical connection upon which any type of packet can be transmitted and upon which the given type of communications protocol can be used. Since these cited claims carry no patentable weight, Examiner has not included a separate rejection for these claims.

24. Regarding claim 2, Applicant's admitted prior art in view of Kowalski discloses that the accessory interface bus includes at least one bi-directional signaling line for transmitting and receiving the communications packets between the accessory and the

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headset adapter in order to control and monitor the accessory (Kowalski: col. 4, lines 23-27, where the TD and CD lines carry packets from the controller to the peripheral devices, and col. 4, lines 46-51, where the TD and CD lines carry packets from the peripheral devices to the controller, such that the TD and CD lines are bidirectional signaling lines).

25. Regarding claims 3, 16, and 27, Applicant's admitted prior art in view of Kowalski discloses that the accessory interface bus further includes: a high voltage rail and a low voltage rail (Applicant: p. 2, lines 3-5, where to provide power to an accessory it is implicit that a high voltage rail and a low voltage rail would be required since a current will only flow between two lines that are of different voltages); and at least one bi-directional signaling line for transmitting and receiving communications packets between the accessory and the headset adapter in order to control and monitor the accessory (Kowalski: col. 4, lines 23-27, where the TD and CD lines carry packets from the controller to the peripheral devices and col. 4, lines 46-51, where the TD and CD lines carry packets from the peripheral devices to the controller, such that the TD and CD lines are bidirectional signaling lines).

26. Claims 33-39 and 70-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Kowalski (USPN 4,654,655) in further view of Endick et al (USPN 5,339,360), of record.

27. Regarding claims 33, 70, and 75, Applicant's admitted prior art in view of Kowalski discloses each limitation of claims 33, 70, and 75, as outlined in the rejection of claims 1, 14, 15, 26, 56, and 66, except that the headset adapter tests the headset accessories. Endick teaches, in a telephone system, testing option modules, i.e.

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accessories, (col. 8, lines 7-10) where it is implicit that this is done to ensure that the option modules are operating properly. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the testing of Endick in the system of Applicant's admitted prior art in view of Kowalski to arrive at a system in which the headset adapter is capable of ensuring that the accessories are operating properly.

28. Regarding claims 34-39, 72-74, and 77-79, Examiner notes that these claims recite "intended use" limitations which carry no patentable weight. Specifically, claims 34-39, 72-74, and 77-79 claim limitations pertaining to the structure of a packet transmitted on a bus. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, the bus disclosed by Applicant's admitted prior art in view of Kowalski in further view of Endick is capable of carrying the claimed packet since the bus is merely an electrical connection upon which any type of packet can be transmitted. Since these cited claims carry no patentable weight, Examiner has not included a separate rejection for these claims.

29. Regarding claims 71 and 76, Applicant's admitted prior art in view of Kowalski in further view of Endick discloses that the accessory interface bus includes at least one bi-directional signaling line for transmitting and receiving the communications packets between the accessory and the headset adapter in order to control and monitor the accessory (Kowalski: col. 4, lines 23-27, where the TD and CD lines carry packets from the controller to the peripheral devices and col. 4, lines 46-51, where the TD and CD

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lines carry packets from the peripheral devices to the controller, such that the TD and CD lines are bidirectional signaling lines).


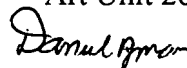
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel J. Ryman
Examiner
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